NUMBERS!

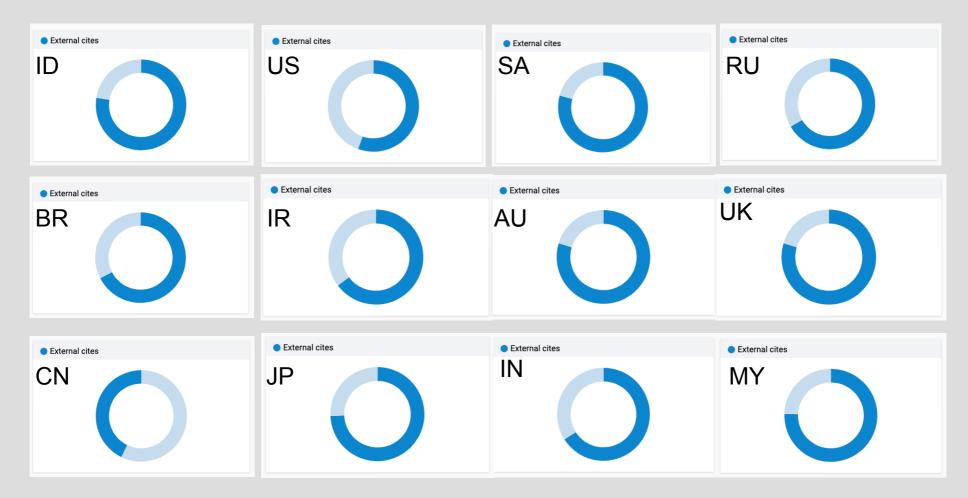


Metode

- Scimagojr.com
- Menu "Viztools"
- Eksplorasi data

Country graph

Self vs external cites



Self vs External cites External cites External cites external cites **Biochem** Agricultural Business dari Bio Indonesia pada Sci berbagai kategori External cites External cites External cites Computer Chemical Earth Sci **Planet** Eng Sci External cites External cites External cites Energy Material Math Sci

| Documents by subject areas | | | | | | | | | | | | |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| | | | | | | | | | | | | |
| Agricultural and Biological Sciences | _ | | | | | | | | | | | |
| Arts and Humanities | _ | | | | | | | | | | | |
| Biochemistry, Genetics and Molecular Biology | | | | | | | | | | | | |
| Business, Management and Accounting | | | | | | | | | | | | |
| Chemical Engineering | | | | | | | | | | | | |
| Chemistry | | | | | | | | | | | | |
| Computer Science | | | | | | | | | | | | |
| Decision Sciences | | | | | | | | | | | | |
| Dentistry | | | | | | | | | | | | |
| Earth and Planetary Sciences | | | | | | | | | | | | |
| Economics, Econometrics and Finance | | | | | | | | | | | | |
| Energy | | | | | | | | | | | | |
| Engineering | | | | | | | | | | | | |
| Environmental Science | | | | | | | | | | | | |
| Health Professions | | | | | | | | | | | | |
| Immunology and Microbiology | | | | | | | | | | | | |
| Materials Science | | | | | | | | | | | | |
| Mathematics | | | | | | | | | | | | |
| Medicine | | | | | | | | | | | | |
| Multidisciplinary | | | | | | | | | | | | |
| Neuroscience | _ | | | | | | | | | | | |
| Nursing | | | | | | | | | | | | |
| Pharmacology, Toxicology and Pharmaceutics | | | | | | | | | | | | |
| Physics and Astronomy | | | | | | | | | | | | |
| Psychology | | | | | | | | | | | | |
| Social Sciences | | | | | | | | | | | | |
| Veterinary | _ | | | | | | | | | | | |
| , | 1996 | 1998 | 2000 | 2002 | 2004 | 2006 | 2008 | 2010 | 2012 | 2014 | 2016 | 2018 |
| | | | | | | | Year | | | | | |

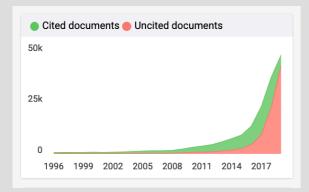
Docs by subject areas

Menunjukkan perkembangan jumlah docs per subject areas tahun 1996-2020

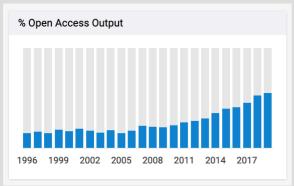
Ada yang berkembang sejak lama (seperti engineering, computer science)

Ada yang belakangan (seperti earth and planetary sciences, energy, physics and astronomy)

Banyak juga yang stagnan (seperti matematika, arts and humanities, agricultural biological sciences)







Jumlah totalnya mengalami peningkatan yang ditandai dengan "tekuk lereng"/ slope break (istilah geomorfologi) pada tahun 2008 (1294), 2012 (3288), 2015 (6106), 2016 (8446).

Jumlah external cites dan selfcites meningkat secara proporsional dengan spike terjadi di tahun 2000, 2009 dan 2014. Penyebab?

Peningkatan jumlah sitasi (sepertinya) berhubungan dengan peningkatan jumlah dokumen berjenis OA.

Output: % of the World % of BRIICS % of Asiatic Region 3.2 2.4 0.8

Proporsi luaran

Pada tahun 2008 = 0,07% dunia dan 0,28% asiatik

Pada tahun 2019 = 1,36% dunia dan 3,54% asiatik



% kolaborasi internasional

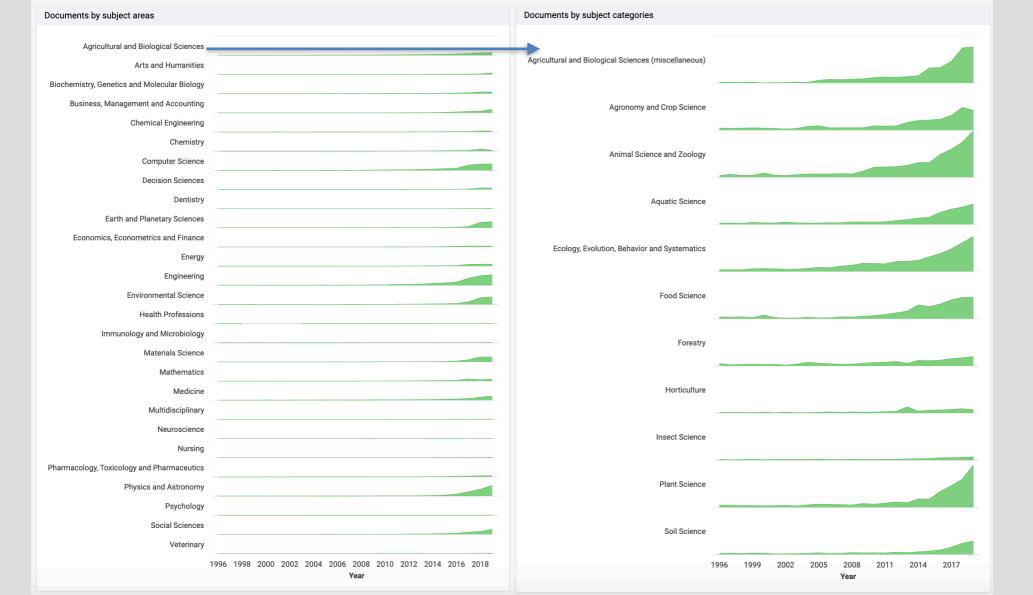
Menunjukkan % dokumen yang ditulis bersama dengan penulis dari negara lain.

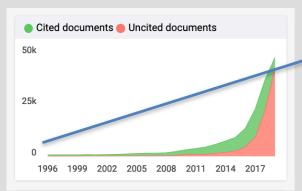
Menurun. Penyebab?

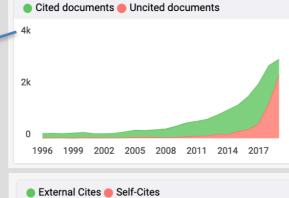
Sekarang kita bandingkan dengan kondisi

pada beberapa subject area

Agricultural and biological sciences

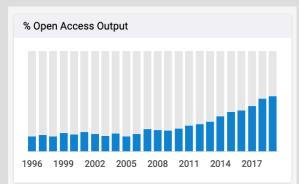


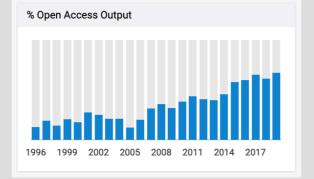


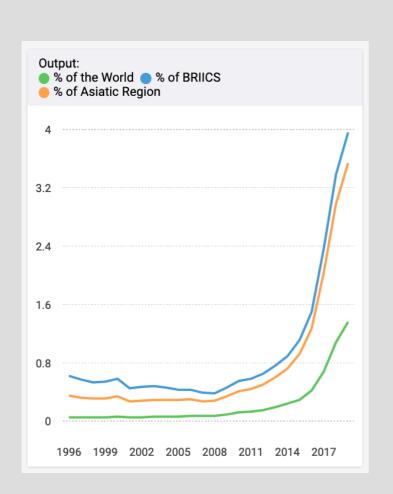


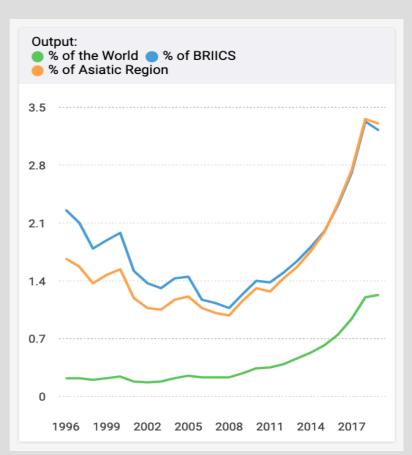










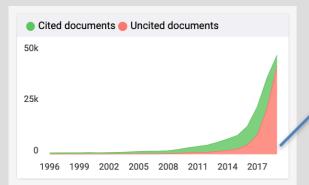




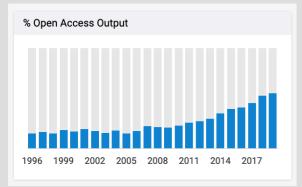


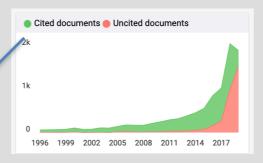
Biochemistry, genetics, and molecular biology

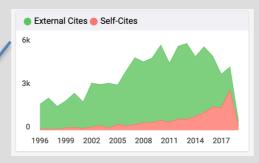
| Documents by subject areas | | Documents by subject categories | |
|---|---|--|---|
| Agricultural and Biological Sciences Arts and Humanities | | Aging | |
| Biochemistry, Genetics and Molecular Biology | | Biochemistry | |
| Business, Management and Accounting | | | |
| Chemical Engineering | | Biochemistry, Genetics and Molecular Biology (miscellaneous) | |
| Chemistry | | | |
| Computer Science | | Biophysics | |
| Decision Sciences | | Biotechnology | |
| Dentistry | | bioteciniology | |
| Earth and Planetary Sciences | | Cancer Research | |
| Economics, Econometrics and Finance | | | |
| Energy | | Cell Biology | |
| Engineering | | | |
| Environmental Science | | Clinical Biochemistry | |
| Health Professions | | Developmental Biology | |
| Immunology and Microbiology | | | |
| Materials Science | | Endocrinology | |
| Mathematics | | | |
| Medicine | | Genetics | |
| Multidisciplinary | | | |
| Neuroscience | | Molecular Biology | |
| Nursing Pharmacology, Toxicology and Pharmaceutics | | Molecular Medicine | |
| Physics and Astronomy | | | |
| Psychology | | Physiology | |
| Social Sciences | | | |
| Veterinary | | Structural Biology | |
| | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 | 1 | 1996 1999 2002 2005 2008 2011 2014 2017 |
| | Year | | Year |

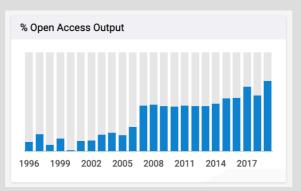


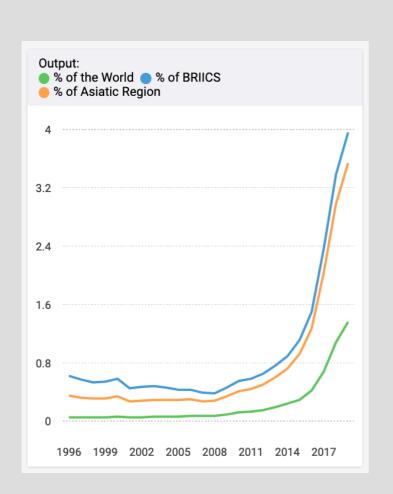


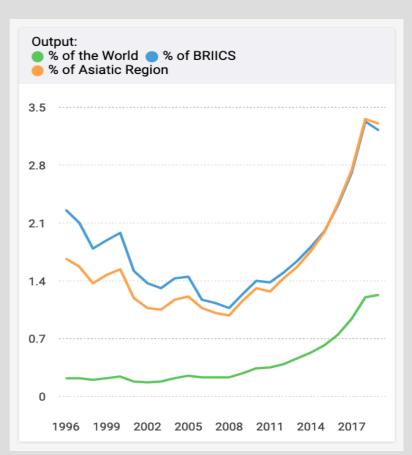




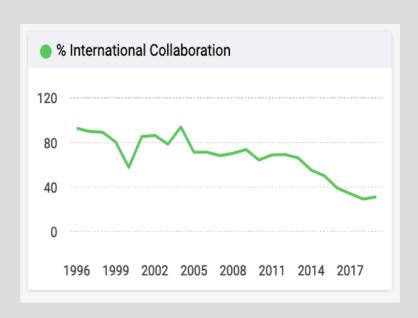






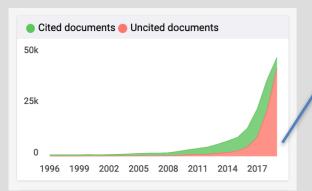




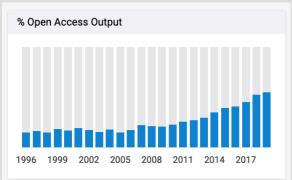


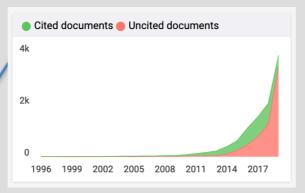
Business, management, accounting

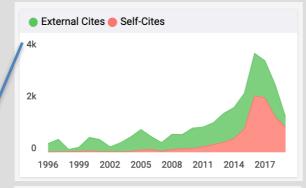
| Documents by subject areas | | Documents by subject categories | | | | | | | | |
|--|--|---|------|------|------|------|---------------------|------|------|------|
| Agricultural and Biological Sciences Arts and Humanities Biochemistry, Genetics and Molecular Biology | | Accounting | | | | | | | | |
| Business, Management and Accounting | | Business and International Management | | | | | | | | |
| Chemical Engineering | | business and international Management | | | | | | | | |
| Chemistry | | | | | | | | | | |
| Computer Science | | Business, Management and Accounting (miscellaneous) | | | | | | | | |
| Decision Sciences | | | | | | | | | | |
| Dentistry | | | | | | | | | | |
| Earth and Planetary Sciences | | Industrial Relations | | | | | | | | |
| Economics, Econometrics and Finance | | | | | | | | | | |
| Energy | | | | | | | | | | |
| Engineering | | Management Information Systems | | | | | | | | |
| Environmental Science | | | | | | | | | | |
| Health Professions | | Management of Technology and Innovation | | | | | | | | |
| Immunology and Microbiology | | | | | | | | | | |
| Materials Science | | | | | | | | | | |
| Mathematics | | Marketing | | | | | | | | |
| Medicine | | | | | | | | | | |
| Multidisciplinary | | | | | | | | | | |
| Neuroscience | | Organizational Behavior and Human Resource Management | | | | | | | | |
| Nursing | | | | | | | | | | |
| Pharmacology, Toxicology and Pharmaceutics | | Strategy and Management | | | | | | | | |
| Physics and Astronomy | | Strategy and Management | | | | | | | | |
| Psychology | | | | | | | | | | |
| Social Sciences | | Tourism, Leisure and Hospitality Management | | | | | | | | |
| Veterinary | | | | | | | | | | |
| | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year | | 1996 | 1999 | 2002 | 2005 | 2008 Year | 2011 | 2014 | 2017 |

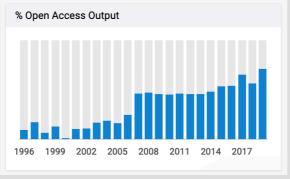


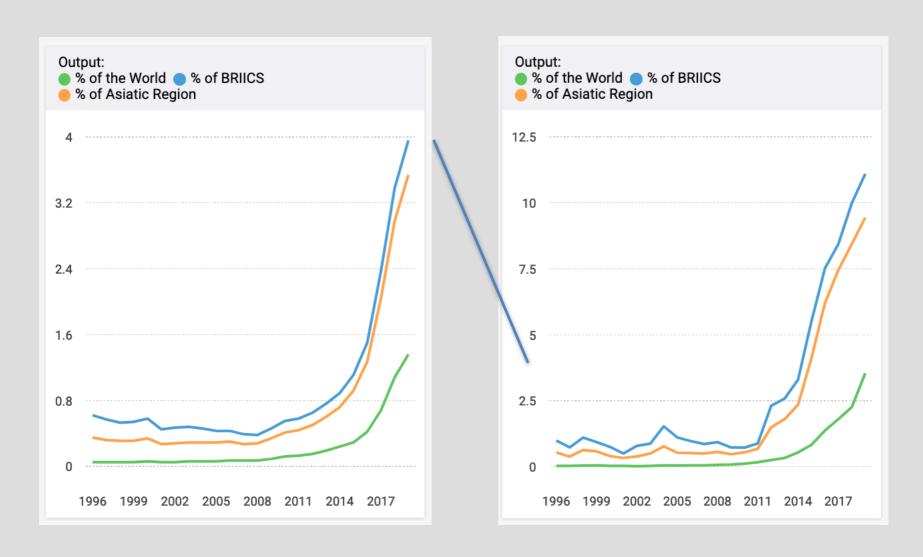




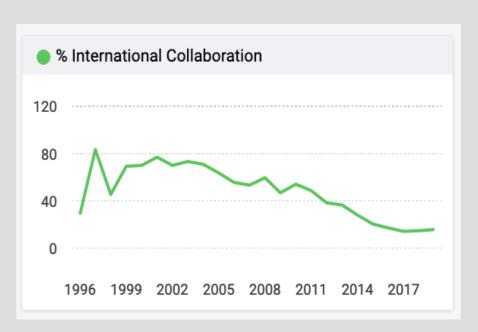






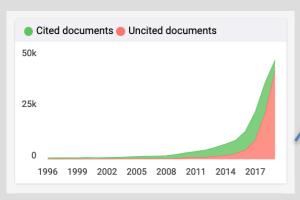




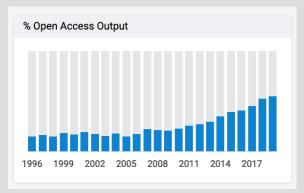


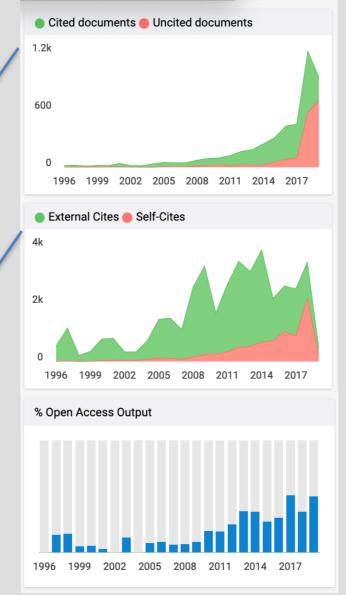
Chemical engineering

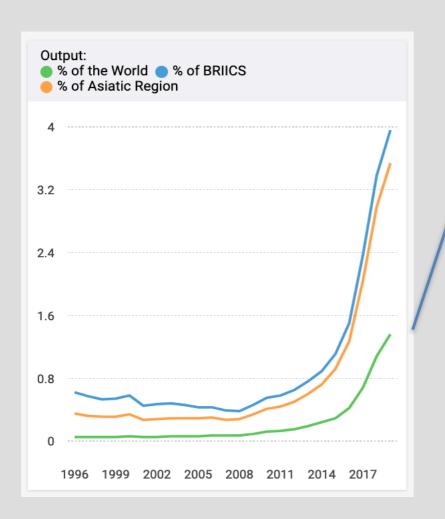
| Documents by subject areas | | Documents by subject categories | |
|--|---|--------------------------------------|--|
| Agricultural and Biological Sciences Arts and Humanities Biochemistry, Genetics and Molecular Biology Business, Management and Accounting | | Bioengineering | |
| Chemical Engineering | | | |
| Chemistry | | Catalysis | |
| Computer Science | | | |
| Decision Sciences | | | |
| Dentistry | | Chemical Engineering (miscellaneous) | |
| Earth and Planetary Sciences | | | |
| Economics, Econometrics and Finance | | | |
| Energy | | Chemical Health and Safety | |
| Engineering | | Chemical Health and Safety | |
| Environmental Science | | | |
| Health Professions | | | |
| Immunology and Microbiology | | Colloid and Surface Chemistry | |
| Materials Science | | | |
| Mathematics | | | |
| Medicine | | Filtration and Separation | |
| Multidisciplinary | | | |
| Neuroscience | | | |
| Nursing | | Fluid Flow and Transfer Processes | |
| Pharmacology, Toxicology and Pharmaceutics | | | |
| Physics and Astronomy | | | |
| Psychology | | | |
| Social Sciences | | Process Chemistry and Technology | |
| Veterinary | | | |
| | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year | | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year |
| | i cai | | 1-2- |

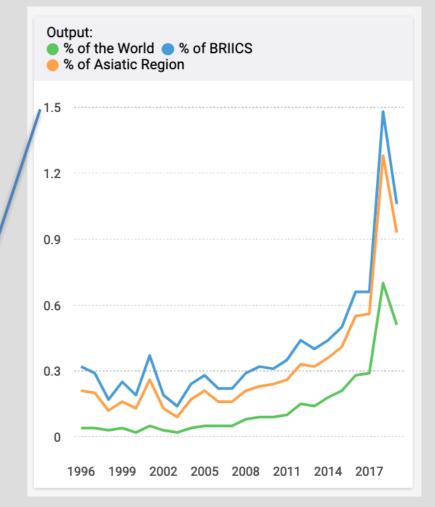


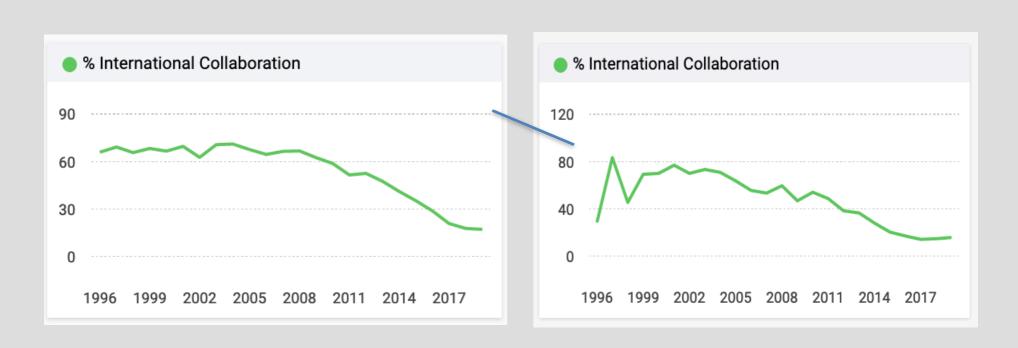






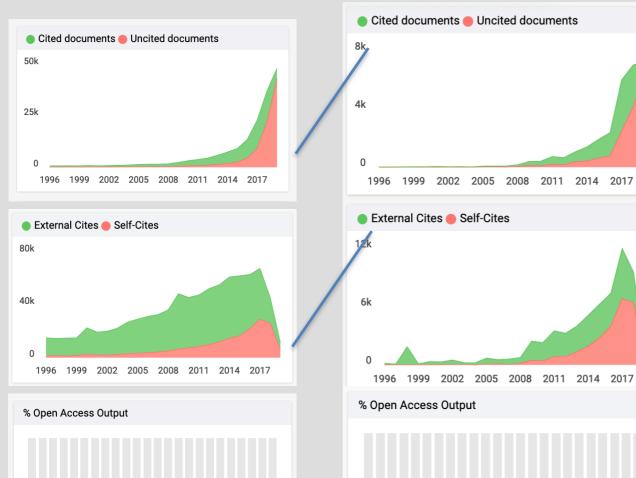






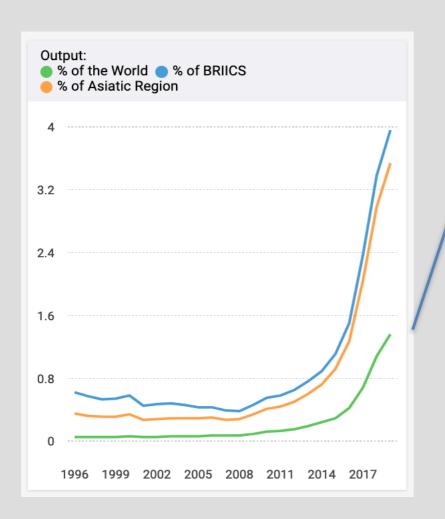
Computer sciences

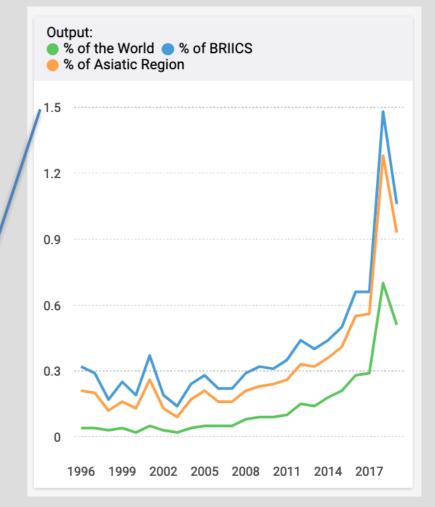
| Documents by subject areas | | Documents by subject categories | | | | | | | |
|---|---|---|--------|----------|--------|---------------------|------|------|------|
| Agricultural and Biological Sciences Arts and Humanities Biochemistry, Genetics and Molecular Biology | | Artificial Intelligence Computational Theory and Mathematics | | | | | | | |
| Business, Management and Accounting | | , | | | | | | | |
| Chemical Engineering | | | | | | | | | |
| Chemistry | | Computer Graphics and Computer-Aided Design | | | | | | | |
| Computer Science | | | | | | | | | |
| Decision Sciences | | Computer Networks and Communications | | | | | | | |
| Dentistry | | | | | | | | | |
| Earth and Planetary Sciences Economics, Econometrics and Finance | | Computer Science Applications | | | | | | | |
| Energy | | | | | | | | | |
| Engineering | | Computer Science (miscellaneous) | | | | | | | |
| Environmental Science | | | | | | | | | |
| Health Professions | | Computer Vision and Pattern Recognition | | | | | | | |
| Immunology and Microbiology | | computer vision and rattern recognition | | | | | | | |
| Materials Science | | | | | | | | | |
| Mathematics | | Hardware and Architecture | | | | | | | |
| Medicine | | | | | | | | | |
| Multidisciplinary | | Human-Computer Interaction | | | | | | | |
| Neuroscience | | | | _ | | | | | |
| Nursing | | Information Systems | | | | | | | |
| Pharmacology, Toxicology and Pharmaceutics | | | | | | | | | |
| Physics and Astronomy | | Signal Processing | | | | | | | |
| Psychology | | | | | | | | | |
| Social Sciences | | Software | | | | | | | |
| Veterinary | | | | | | | | | |
| | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year | | 1996 1 | 999 2002 | 2 2005 | 2008 Year | 2011 | 2014 | 2017 |



2005 2008 2011 2014 2017

2002 2005 2008 2011 2014 2017

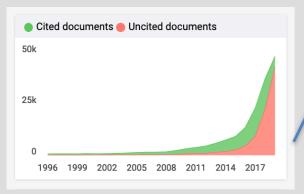




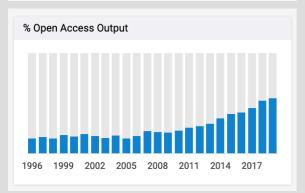


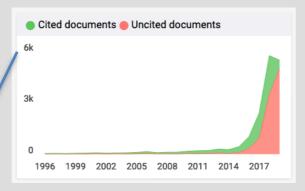
Material sciences

| Documents by subject areas | | Documents by subject categories | |
|---|--|--|--|
| Agricultural and Biological Sciences Arts and Humanities Biochemistry, Genetics and Molecular Biology | | Biomaterials | |
| Business, Management and Accounting Chemical Engineering Chemistry | | Ceramics and Composites | |
| Computer Science Decision Sciences Dentistry | | Electronic, Optical and Magnetic Materials | |
| Earth and Planetary Sciences Economics, Econometrics and Finance Energy | | Materials Chemistry | |
| Engineering Environmental Science Health Professions | | Materials Science (miscellaneous) | |
| Immunology and Microbiology Materials Science Mathematics | | Metals and Alloys | |
| Medicine Multidisciplinary Neuroscience | | Nanoscience and Nanotechnology | |
| Nursing Pharmacology, Toxicology and Pharmaceutics Physics and Astronomy | | Polymers and Plastics | |
| Psychology Social Sciences Veterinary | | Surfaces, Coatings and Films | |
| | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year | 1 | 996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year |

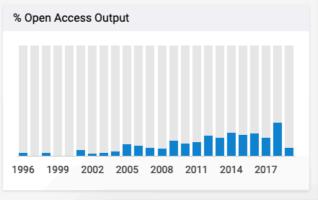


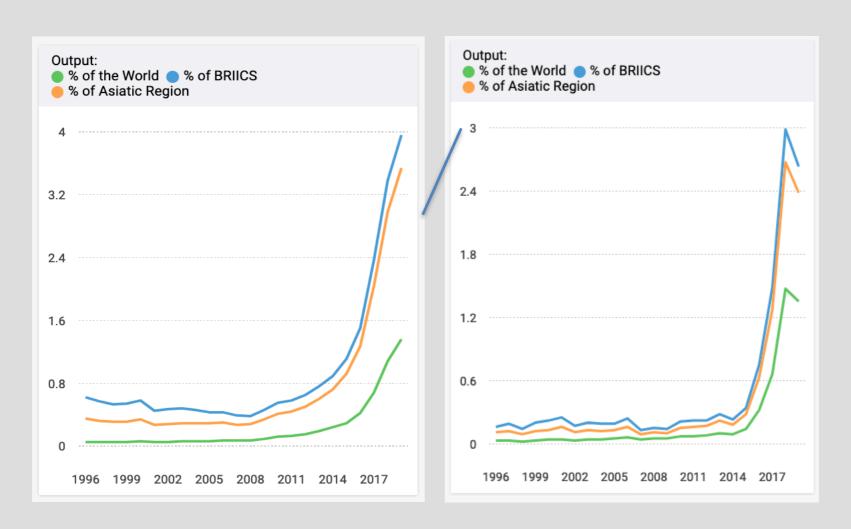


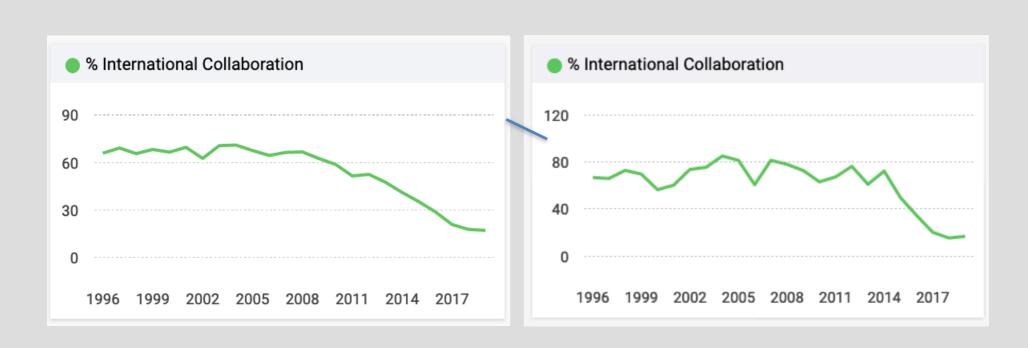






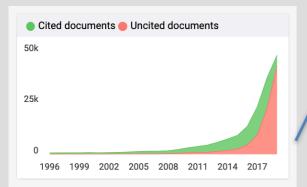




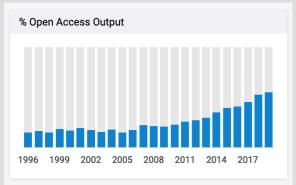


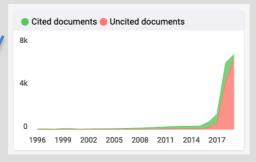
Earth and planetary science

| Documents by subject areas | | Documents by subject categories | | | | | | | |
|---|---|--|----------|---------|------|------|------|------|------|
| Agricultural and Biological Sciences Arts and Humanities | | Atmospheric Science | | | | | | | |
| Biochemistry, Genetics and Molecular Biology | | Computers in Earth Sciences | | | | | | | |
| Business, Management and Accounting | | Computers in Earth Sciences | | | | | | | |
| Chemical Engineering | | Earth and Planetary Sciences (miscellaneous) | | | | | | | |
| Chemistry | | Earth and Franctary Sciences (miscenaneous) | | | | | | | |
| Computer Science | | Forth Curfose Pressure | | | | | | | |
| Decision Sciences | | Earth-Surface Processes | | | | | | | |
| Dentistry | | Farancia Octobra | | | | | | | |
| Earth and Planetary Sciences | | Economic Geology | | | | | | | |
| Economics, Econometrics and Finance | | 0.1 | | | | | | | |
| Energy | | Geochemistry and Petrology | | | | | | | |
| Engineering | | | | | | | | | |
| Environmental Science | | Geology | | | | | | | |
| Health Professions | | | | | | | | | |
| Immunology and Microbiology | | Geophysics | | | | | | | |
| Materials Science | | | | | | | | | |
| Mathematics | | Geotechnical Engineering and Engineering Geology | | | | | | | |
| Medicine | | | | | | | | | |
| Multidisciplinary Neuroscience | | Oceanography | | | | | | | |
| Neuroscience | | | | | | | | | |
| Pharmacology, Toxicology and Pharmaceutics | | Paleontology | | | | | | | |
| Physics and Astronomy | | | | | | | | | |
| Psychology | | Space and Planetary Science | | | | | | | |
| Social Sciences | | | | | | | | | |
| Veterinary | | Stratigraphy | | | | | | | |
| • | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 | | 1996 199 | 99 2002 | 2005 | 2008 | 2011 | 2014 | 2017 |
| | Year | | | | | Year | | | |

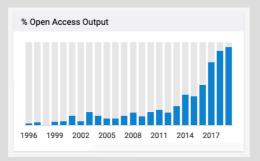


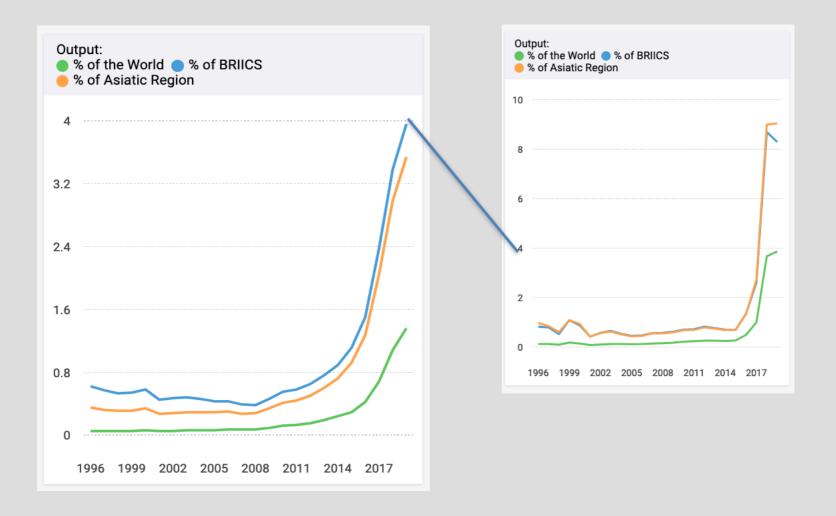


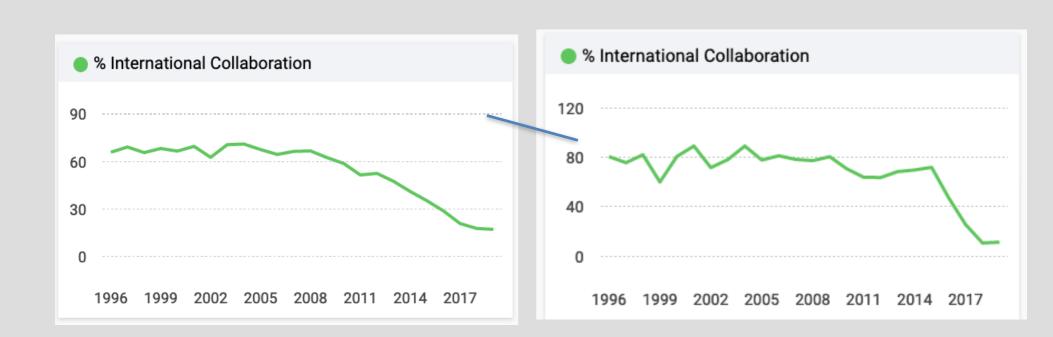




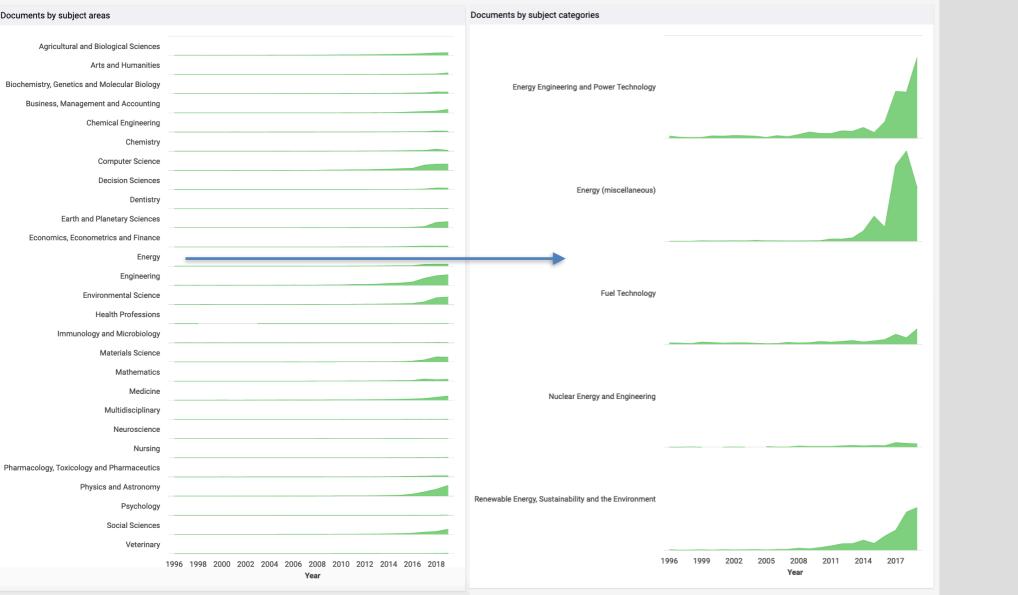


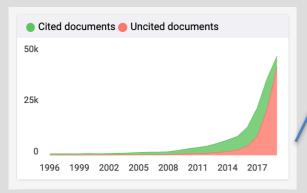


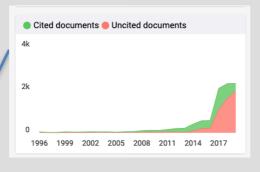




Energy

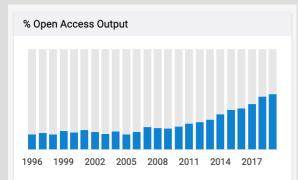


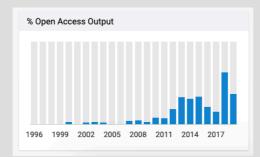


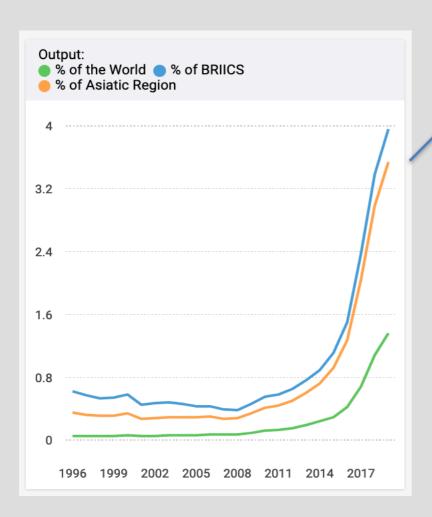


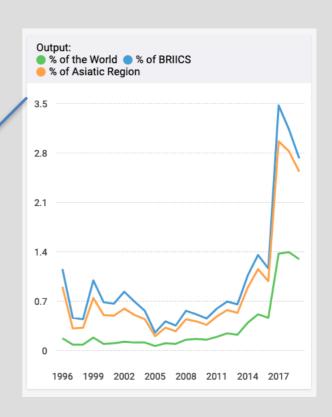




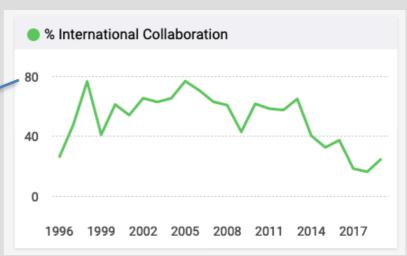






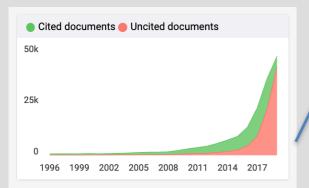


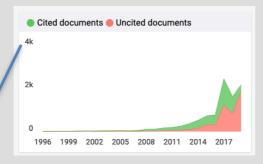




Mathematics

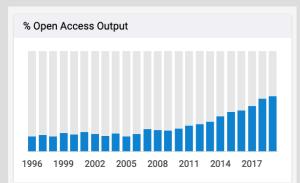
| Documents by subject areas | | ocuments by subject categories | |
|---|--|--|--|
| Agricultural and Biological Sciences Arts and Humanities | | Algebra and Number Theory | |
| Biochemistry, Genetics and Molecular Biology | | Analysis | |
| Business, Management and Accounting | | Allayolo | |
| Chemical Engineering | | Applied Mathematics | |
| Chemistry | | | |
| Computer Science | | Computational Mathematics | |
| Decision Sciences | | | |
| Dentistry | | Control and Optimization | |
| Earth and Planetary Sciences | | | |
| Economics, Econometrics and Finance | | Discrete Mathematics and Combinatorics | |
| Energy | | | |
| Engineering | | Geometry and Topology | |
| Environmental Science | | | |
| Health Professions | | Logic | |
| Immunology and Microbiology | | | - |
| Materials Science | | Mathematical Physics | |
| Mathematics | | | |
| Medicine | | Mathematics (miscellaneous) | |
| Multidisciplinary | | | |
| Neuroscience | | Modeling and Simulation | |
| Nursing | | Numerical Analysis | |
| Pharmacology, Toxicology and Pharmaceutics | | Numerical Analysis | |
| Physics and Astronomy | | Statistics and Probability | |
| Psychology | | Statistics and Probability | |
| Social Sciences | | Theoretical Computer Science | |
| Veterinary | | | |
| | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year | | 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 Year |

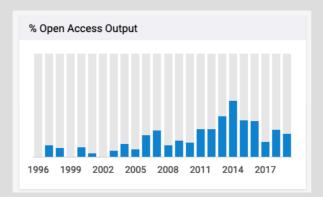


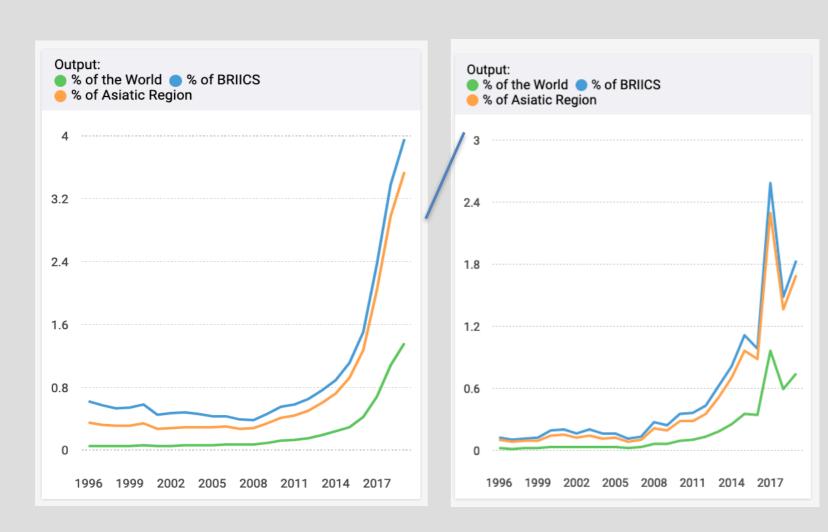








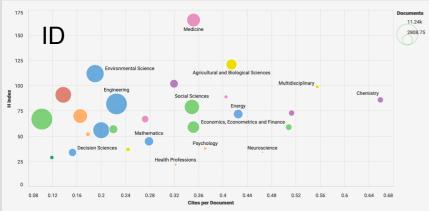


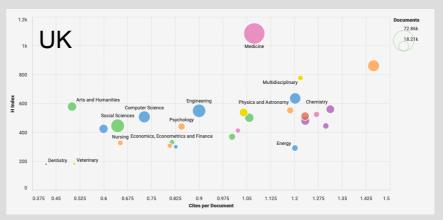


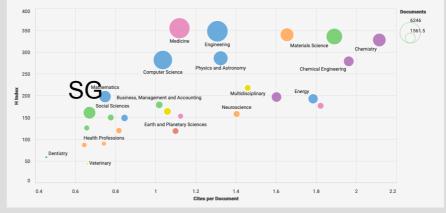
H index and cites per doc

Scimagojr -> VizTools -> Bubble chart









H index and self cites

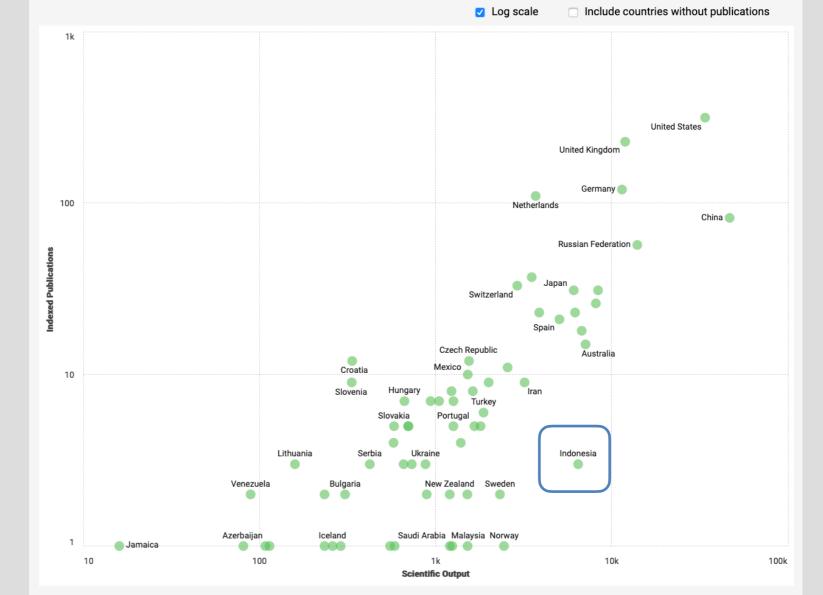
Scimagojr -> VizTools -> Bubble chart



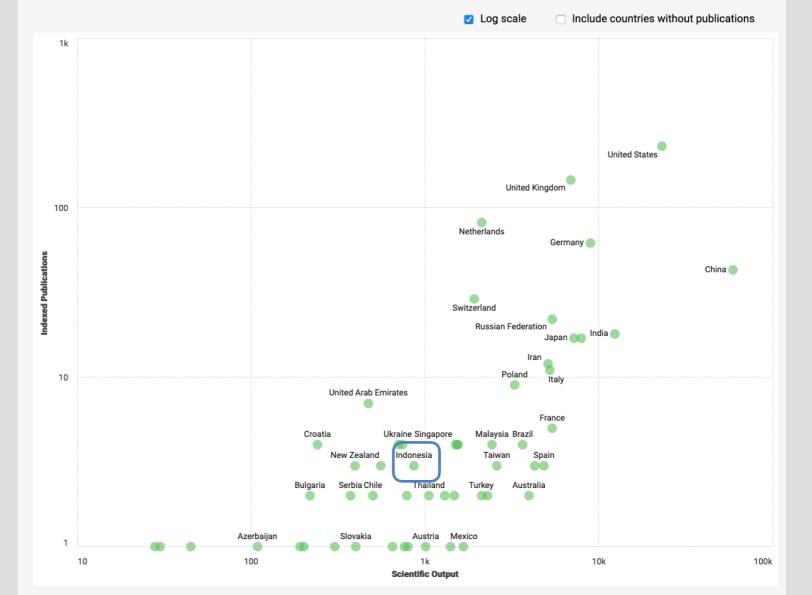
Scimagojr -> VizTools -> Country graph > scatter plot

Indexed pubs vs Scientific output

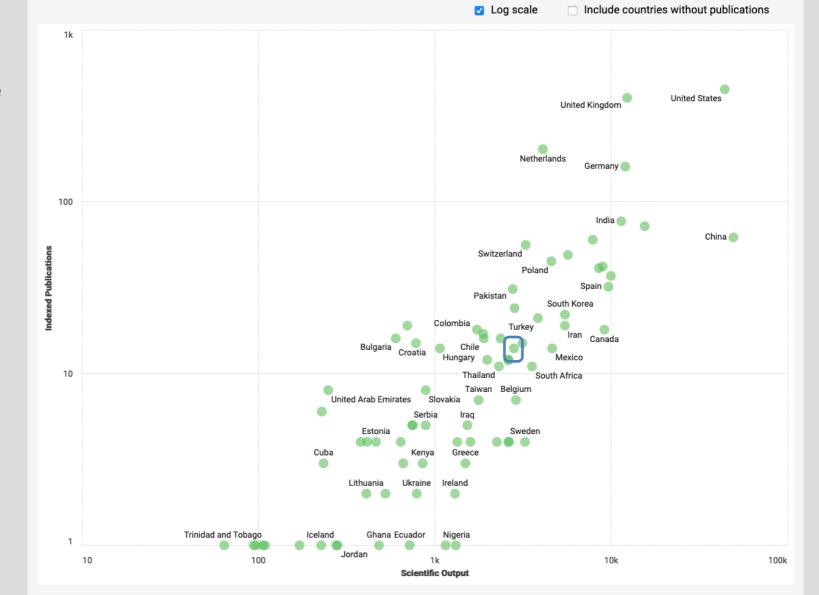
Earth and planetary science



Chemical engineering



Agriculture and biological science



Agriculture and biological science



Energy

